

### REMARKS

Claims 1-18, 20-24 and 26-36 are pending in this application, with claims 1, 6, 12, 18, 24 and 31 being independent. Claims 1, 2, 6, 12, 18, 24 and 31 have been amended. Support for the amendment to the claims can be found in the application at least at Fig. 1 and its accompanying text. No new matter has been introduced.

Independent claims 1, 6 and 18, and their dependent claims 2-5, 7-11 and 19-23, have been rejected as being unpatentable over Wu (U.S. Patent Application No. 2005/0259054) in view of Routley (U.S. Patent Application Publication No. 2006/0001613). Independent claims 1, 6 and 18, and their dependent claims 2-5, 7-11 and 19-23, have been rejected as being unpatentable over Wu in view of Yomano (U.S. Patent Application Publication No. 2005/0057580).

Each of independent claims 1 and 18, as amended, recites, among other features, a transistor that includes a source, a drain and a gate, and a precharge circuit that includes a first terminal and a second terminal, wherein both the first terminal and the second terminal are electrically connected to the gate and one of the source and the drain. Applicants request reconsideration and withdrawal of the rejections of claims 1 and 18, and their dependent claims, because neither Wu, Routley, Yomano, nor any proper combination of the three describes or suggests the recited precharge circuit.

Wu describes a passive driving circuit that includes a MOS transistor G (which the Office Action alleges corresponds to the recited transistor) and a part of precharge circuit 60 (which the Office Action alleges corresponds to the recited precharge circuit) that includes switching devices 62b and 62c, operational amplifier 64, an inverter 68, and sample/hold circuits 66b and 66c. Notably, however, Wu does not describe or suggest that the part of precharge circuit 60 includes a first terminal and a second terminal, wherein both the first terminal and the second terminal are electrically connected to the gate and one of the source and the drain of the MOS transistor G. Rather, as shown in Fig. 7A of Wu, only the output terminal of the inverter 68 is electrically connected to the gate g of the MOS transistor G, with no additional electrical

connection to one of the source and the drain of the MOS transistor G. Routley and Yomano also do not describe or suggest the recited precharge circuit.

For at least these reasons, applicants request reconsideration and withdrawal of the rejections of claims 1 and 18, and their dependent claims.

Independent claim 6, as amended, recites, among other features, a transistor that includes a source, a drain and a gate, and a comparison control circuit that includes an output terminal, a first input terminal, and a second input terminal electrically connected to the gate and one of the source and the drain. Applicants request reconsideration and withdrawal of the rejections of claim 6 and its dependent claims because neither Wu, Routley, Yomano, nor any proper combination of the three describes or suggests the recited comparison control circuit.

The Office Action alleges that Wu's operational amplifier 64 corresponds to the recited comparison control circuit. Notably, however, Wu does not describe or suggest that the operational amplifier 64 include a second input terminal electrically connected to the gate and one of the source and the drain of the MOS transistor G. Rather, as shown in Fig. 7A of Wu, each of the two input terminals are electrically connected to the output terminals of the switching devices 62b and 62c. Routley and Yomano also do not describe or suggest the recited comparison control circuit.

For at least these reasons, applicants request reconsideration and withdrawal of the rejections of claim 6 and its dependent claims.

Independent claims 12, 24 and 31, and their dependent claims 13-17, 25-30 and 32-36, have been rejected as being unpatentable over Oomura (U.S. Patent No. 6,693,388) in view of Routley. Independent claims 12, 24 and 31, and their dependent claims 13-17, 25-30 and 32-36, have been rejected as being unpatentable over Oomura in view of Yomano.

Each of independent claims 12, 24 and 31, as amended, recites, among other features, a transistor that includes a source, a drain and a gate, and a comparison control circuit that includes an output terminal, a first input terminal, and a second input terminal electrically connected to the gate and one of the source and the drain. Applicants request reconsideration and withdrawal of the rejections of claims 12, 24 and 31, and their dependent claims, because neither Oomura,

Routley, Yomano, nor any proper combination of the three describes or suggests the recited comparison control circuit.

Oomura describes an active matrix display that includes an n-type thin film transistor T3 (which the Office Action alleges corresponds to the recited transistor) and a voltage comparator AMP1 (which the Office Action alleges corresponds to the recited comparison control circuit). Oomura, however, does not describe or suggest that the voltage comparator AMP1 includes a second input terminal electrically connected to the gate and one of the source and the drain of the thin film transistor T3. Rather, as shown in Figs. 1 and 6 of Oomura, one input terminal of the voltage comparator AMP1 is electrically connected to a reference voltage source  $V_r$  and the other input terminal of the voltage comparator AMP1 is electrically connected to reference current source  $I_d$  and a drain of the transistor T5. Routley and Yomano also do not describe or suggest the recited comparison control circuit.

For at least these reasons, applicants request reconsideration and withdrawal of the rejections of claim 12, 24 and 31, and their dependent claims.

Applicants submit that all claims are in condition for allowance.

Please apply any necessary charges or credits to Deposit Account 06-1050, referencing the above attorney docket number.

Respectfully submitted,

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